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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,137	08/06/2003	Barinder Singh Rai	VP080	8408

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EXAMINER

LAY, MICHELLE K

ART UNIT PAPER NUMBER

2672

DATE MAILED: 06/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/635,137

Applicant(s)

RAI ET AL.

Examiner

Michelle K. Lay

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-6 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 06 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

The applicant's remarks have been considered and have been found unpersuasive. Applicant has not specifically distinguished between the improvement of the applicant's invention and the prior art.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1 – 6 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,877,741 to Chee et al.

In regards to claims 1, 3 –

Chee et al. discloses a system and method for overlay display data. Illustrated in Fig. 3, a computer system (10) includes a notebook computer (12), and an additional display device (14) interfaced with the notebook computer (12) via a cable (16). The notebook computer (12) includes various input devices, such as a keyboard (18), a floppy disk drive (20), and a track ball (22). The computer system (10) may include additional input devices, such as a hard disk drive, a CD-ROM, and a serial input-output port [column 7, lines 23 – 40], as well as internal devices, such as a processor.

Referring to Fig. 21, the overlay and background data from the graphics memory (1960)

are transferred to the display (14/24) using separate pipelines and are stored in overlay FIFO pipeline (2106) and display FIFO pipeline (2104), respectively [column 19, lines 44 – 47]. The background data may be considered the first portion of the image data as described. An overlay mux (2110) receives the data streams from the display FIFO pipeline (2104) and overlay FIFO pipeline (2106) via paths (2128)(2126), respectively, and selects the data stream to be output to the display. The selection of the proper data stream is based upon control signals from the CRTC (cathode ray tube controller) (2108). This CRTC (2108) also controls the progression of data within display FIFO (2104) and overlay FIFO (2106) pipelines [column 20, lines 17 – 24].

Referring to claims 2, 4 - 6, Chee et al. further teaches displaying an overlay image over a background image. The CRTC (2108) in Fig. 22 is the coordinator of the graphics controller (2050). CRTC (2108) coordinates when display FIFO pipeline (2104) (claim 4) and overlay FIFO pipeline (2106) (claim 5) should read in background and overlay data, respectively, as well as the coordination of which display data (background or overlay) overlay mux (2110) should select [column 23, lines 35 – 46] (claim 6). Illustrated in Fig. 24A, multiple overlays (2422)(2424)(2426)(2428) are displayed over the background image (considered the main image as described). Table 2 [column 22] exhibits the unique X, Y start coordinate, start address, height, width, and scaling factors for the overlay data stored in memory [column 22, lines 25 – 31] for display.

Conclusion

Applicant's remarks filed 04/21/2005 have been fully considered but are found unpersuasive.

In regards to claims **1, 3** –

Chee et al. discloses a system and method for overlay display data. Referring to Fig. 21, the graphics controller (2050) transfers both overlay data and background data from graphics memory (1960) to display (14/24) using separate pipelines (claim **1, 3**: transmitting image data stored in a memory device to a display device). Graphics controller (2050) comprises memory controller (2102), display FIFO pipeline (2104), overlay FIFO pipeline (2106), CRTC (2108), and overlay mux (2110) [column 19, lines 44 – 48]. Overlay mux (2110) receives the data streams from display FIFO pipeline (2104) and overlay FIFO pipeline (2106) via paths (2128, 2126), respectively, and selects the data stream to be output to the display (claim **1, 3**: selecting a first portion and not fetching the remaining data) [column 20, lines 17 – 21]. Thus, the overlay mux (2110) decides on a first portion of the image data, i.e. display (background) or overlay, and retrieves this data from the respective pipeline to display therefore, not fetching the remaining image data, i.e. overlay or display (background). The selection of the proper data stream is based upon control signals from CRTC (2108). CRTC (2108) also controls the progression of data within display FIFO (2104) and overlay FIFO pipeline (2106) (claim **3**: control logic) [column 20, lines 21 – 24].

In regards to claim **2, 4 – 6** –

Overlapping overlays (or windows) are distinguishable based upon priority mechanisms that indicate the relative areas of screen ownership [column 23, lines 30 – 33]. The CRTC (2108) comprises additional software processing to determine the order that overlay FIFO pipeline (2106) downloads overlay data. The CRTC (2108) is the coordinator of graphics controller (2050). CRTC (2108) coordinates the functions of display FIFO pipeline (2104) and overlay FIFO pipeline (2106) and coordinates when display FIFO pipeline (2104) (claim 4: first display pipe) and overlay FIFO pipeline (2106) (claim 5: second display pipe) should read in background and overlay data, respectively. The CRTC (2108) also coordinates which display data, i.e. background or overlay, the overlay mux (2110) should select [column 23, lines 35 – 46] (claims 4 – 6: control logic). Illustrated in Fig. 24A, multiple overlays (2422)(2424)(2426)(2428) are displayed over the background image (considered the main image as described). Table 2 [column 22] exhibits the unique X, Y start coordinate, start address, height, width, and scaling factors for the overlay data stored in memory for display (claim 6: location defining information) [column 22, lines 25 – 31].

In regards to claim **2**, the method of Chee et al. selects the first portion of the image data via the logic provided by the CRTC (2108) based upon priority to allow overlapping. Thus the display (background) data from the display FIFO pipeline (2104) is the main image data as claimed and can be selected first by the logic of the CRTC (2108) controlling the overlay mux (2110). Additionally, the remaining image data, i.e. overlay data from the overlay FIFO pipeline (2106) corresponds to the second portion of

the image data that will be overlapped with the display data from the display FIFO pipeline (2104).

In regards to claims **4, 5**, the apparatus of Chee et al. comprises multiple pipelines, i.e. FIFO pipeline (2104), overlay FIFO pipeline (2106) as disclosed from the rationale of claim **1**. The overlay mux (2110) selects the data stream to be output to the display. The overlay mux (2110) allows switching from one pipe to the other to obtain the rest of the image data.

Furthermore, in regards to claim **6**, the CRTC (2108) provides the logic to indicate the relative areas of screen ownership, i.e. location, for the respective image data. CRTC (2108) coordinates the overlay mux (2110), which provides the means for switching between the pipelines.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle K. Lay whose telephone number is (571) 272-7661. The examiner can normally be reached on Monday - Friday, 7:00am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (571) 272-7664. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michelle K. Lay
Examiner
Art Unit 2672

06.06.2005 mkl


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SUPERVISORY PATENT EXAMINER
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4/3/05